

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed July 2, 2004. Reconsideration and allowance of the application and pending claims are respectfully requested.

### **I. Specification Objection**

The specification has been objected to for not reflecting the current status of a patent application that has matured into a patent. In response to the objection, Applicant has amended the specification to identify the relevant patent number.

### **II. Claim Objections**

Claims 8 and 9 have been objected to for purportedly lacking antecedent basis for the term “dye assistant”. Applicant respectfully disagrees that antecedent basis is lacking in those claims because each claim introduces the term “dye assistant” with the indefinite article “a”. When a term is preceded by “a”, no antecedent is necessary for that term. Applicant therefore submits that claims 8 and 9 are not objectionable.

### **III. Claim Rejections - 35 U.S.C. § 102(b)**

Claims 1 and 5-7 have been rejected under 35 U.S.C. § 102(b) as being anticipated by JP-50-90778 (“Ono”). Applicant respectfully traverses this rejection.

It is axiomatic that “[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” W. L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983)(emphasis

added). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(b). In the present case, not every feature of the claimed invention is represented in the Mitsubishi reference. Applicant discusses the Ono reference and Applicant's claims in the following.

**A. The Ono Disclosure**

Ono discloses a knitted weave that comprises a blend of aromatic polyamide fibers and non-thermoplastic fibers. Ono, page 3, "Claims" section. As is described by Ono, the knitted weave is "colored" to comply with a particular standard. Ono, page 4, first full paragraph.

Ono describes various methods for "coloring" the knitted weave at the top of page 6.

These methods include:

1. The aromatic polyamide fibers are mixed spun with non-thermoplastic fibers, and only one of either of the fibers is colored in the form of a yarn or a knitted weave.
2. The aromatic polyamide fibers or non-thermoplastic fibers are pre-dyed, and the fibers are then mixed spun.
3. The aromatic polyamide fibers and non-thermoplastic fibers are mixed spun, and both fibers are dyed in the form of yarn or a knitted weave.
4. The aromatic polyamide fibers and non-thermoplastic fibers are pre-dyed and then mixed spun.

Ono describes no other coloring methods.

## B. Applicant's Claims

Applicant's independent claim 1 provides (emphasis added):

1. A *patterned* flame resistant fabric, comprising:  
a plurality of non-producer colored high tenacity, flame resistant fibers;  
a plurality of cellulosic fibers containing a flame retardant compound, the cellulosic fibers being blended with the high tenacity, flame resistant fibers; and  
*at least one color that is printed on the fabric to form said pattern.*

In regard to the limitations of claim 1, Applicant first notes that Ono does not disclose a “patterned flame resistant fabric” as is explicitly provided in the preamble of claim 1. Although Ono describes that the knitted fabric is “colored,” mere anticipation of coloring a fabric does equate to anticipation of forming a pattern on the fabric.

The meaning of the term “pattern” is well established in the art. As is provided in the Hoeschst Celanese Dictionary of Fiber & Textile Technology (1990), the term “pattern” means “[a]n arrangement of form; a design or decoration such as the design of woven or printed fabrics.” Clearly Ono does not disclose or suggest formation of such a pattern.

As a further point, Applicant notes that the term “patterned” must be given patentable weight in the examination of claim 1, even though that term appears in the preamble, given that the body of the claim gives life and meaning to the term through the recitation of “at least one color that is printed on the fabric to form said pattern”.

This last point reveals a further shortcoming of the Ono disclosure in relation to claim 1. Specifically, given that Ono only describes “coloring” a knitted fabric through dyeing, Ono fails to disclose a color that is “printed on the fabric” as is required by claim 1. As is well known to persons having ordinary skill in the art, printing is not equivalent to dyeing. The term “printing” defined as follows in the Hoescht Celanese Dictionary of Fiber & Textile Technology (1990):

PRINTING: A process for producing a pattern on yarns, warp, fabric, or carpet by any of a large number of printing methods. The color or other treating material, usually in the form of a paste, is deposited onto the fabric which is then usually treated with steam, heat, or chemicals for fixation.

In addition to the process of printing being different from the process of dyeing, Applicant notes that persons having ordinary skill in the art can readily determine through routine inspection whether a fabric has been colored through printing as opposed to dyeing. Therefore, to describe a fabric as a printed fabric is to describe a physical attribute of the fabric as opposed to merely describing a manufacturing process through which the fabric was colored.

Due to the shortcomings of the Ono reference described in the foregoing, Applicant respectfully asserts that Ono does not anticipate Applicant’s claim 1, or claims 5-7 which depend therefrom. Therefore, Applicant respectfully requests that the rejection of these claims be withdrawn.

#### **IV. Claim Rejections - 35 U.S.C. § 103(a)**

Claims 1-7 and 27-35 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ono in view of Hussamy (U.S. Pat. No. 4,705,523) and Riggins, et al. (“Riggins,” U.S. Pat. No. 4,898,596). Applicant respectfully traverses this rejection.

As has been acknowledged by the Court of Appeals for the Federal Circuit, the U.S. Patent and Trademark Office (“USPTO”) has the burden under section 103 to establish a proper case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. See In re Fine, 837 F.2d 1071, 5 USPQ 2d 1596, 1598 (Fed. Cir. 1988). Accordingly, to make a proper case for obviousness, there must be a prior art teaching or established knowledge that would suggest to a person having ordinary skill in the pertinent art to fill the voids apparent in the applied reference. It is respectfully asserted that no such case has been made in the outstanding Office Action.

As is noted above in relation to claim 1, Ono fails to disclose either of a “patterned” fabric or a “color that is printed on the fabric to form said pattern.” In the description of the rejection under section 103, it is stated that Hussamy describes printing of a camouflage pattern on aramid fabrics and that, in view of that teaching:

A person having ordinary skill in the art at the time the invention was made would have found it obvious to print the pattern of camouflage on the textile of JP-50-90778, motivated by the reasoned expectation that it is an obvious design choice, as is any pattern that is printed. However, one would chose [sic] this particular pattern if one were making military uniforms.

From the above excerpt, it appears that the Office Action incorrectly presumes that Ono already contemplates forming patterns on fabric and, therefore, forming another pattern, such as a camouflage pattern as suggested by Hussamy, would have been an obvious design choice. This is just not the case at least because the Ono disclosure only discloses dyeing fabrics, not forming patterns on them.

Missing from the rejection is an explanation of why a person having ordinary skill in the art would be motivated to apply a pattern to Ono's fabric on the first place. As is stated in the Manual of Patent Examining Procedure (MPEP) section 2143:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teaching. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

Given that the Office Action has identified no proper "suggestion or motivation" to make the suggested modification to Ono's fabric, the rejection fails to state a *prima facie* case for obviousness.

In further regard to the Hussamy reference, Applicant notes that Hussamy fails to teach or suggest dyeing *blended fabrics* that include "non-producer colored high tenacity, flame resistant fibers" **and** "cellulosic fibers containing a flame retardant compound". Instead, Hussamy only discusses dyeing "aramid" fabric. As is known in the art, aramid

fibers are relatively difficult to dye or print. Even Ono confirms this fact (page 6, first full paragraph):

Although such methods can be adopted, it is generally more advantageous to dye only the non-thermoplastic fibers when the mixed spun non-thermoplastic fibers are readily dyed, because aromatic polyamide fibers are more difficult to dye under ordinary conditions.

Applicant also addresses this point and, more particularly, describes the difficulties associated with blends of aramid fibers and cellulosic fibers (page 8, lines 10-18):

. . . the flame retardants contained in FR cellulosics tend to be depleted by the relatively high temperatures generally considered necessary to affix dye within flame resistant fibers such as para-aramid fibers. The depletion of these flame retardants significantly reduces the flame resistance of the cellulosic fibers and therefore reduces the flame resistance of these blends.

Given that it is conventionally believed that only high temperatures are needed to dye or print aramid fibers, such as para-aramid fibers, and given that it is generally known that high temperatures deplete flame retardants, Hussamy's teaching of printing on 100% aramid fabrics would simply not motivate a person having ordinary skill in the art to perform such printing on Ono's blended fabric. Indeed, in view of Ono's own suggestion against dyeing the polyamide (aramid) fibers of Ono's fabric blends, Ono actually *teaches away* from such a modification. As is well established in the law, "[t]here is no suggestion to combine . . . if a reference teaches away from its combination with another

source . . . A reference may be said to each away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant . . .” *Tec Air, Inc. v. Denso Manufacturing Michigan Inc.*, 192 F.3d 1353, 52 USPQ2d 1294 (Fed. Cir. 1999).

In view of the foregoing, Applicant respectfully submits that Hussamy does not provide proper motivation for any of (i) printing on Ono’s fabric, (ii) forming a pattern on Ono’s fabric, or (iii) forming Ono’s fabric as a camouflage-patterned fabric. Hence, the rejection fails to render either of claims 1 or 30 obvious.

In summary, it is Applicant’s position that a proper case for obviousness has not been made against Applicant’s independent claims 1 and 30, or the claims that depend therefrom. Therefore, it is respectfully submitted that the rejection of these claims should be withdrawn.

## **V. Double Patenting Rejections**

### **A. Rejection Under U.S. Patent 6,132,476**

Claims 1-9 and 27-35 have been rejected under the doctrine of obviousness-type double patenting as being unpatentable in view of “the claims” of U.S. Patent No. 6,132,476. Applicant respectfully traverses.

In regard to the rejection, the Office Action only states:

Although the conflicting claims are not identical, they are not patentably distinct from each other because they appear to be obvious variants of one another.



Applicant objects to the rejection as clearly improper. As is provided in MPEP section 804(I)(B)(1) (emphasis added):

A double patenting rejection of the obviousness-type is “analogous to ‘a failure to meet’ the nonobviousness requirement of 35 U.S.C. 103” except that the patent principally underlying the double patenting rejection is not considered prior art. *In re Braithwaite*, 379 F.2D 594, 154 USPQ 29 (CCPA 1967). Therefore, ***any analysis employed in an obviousness-type double patenting rejection parallels the guidelines for analysis of a 35 U.S.C. 103 obviousness determination.*** *In re Braat*, 937 F.2d 589, 19 USPQ2d 1289 (Fed. Cir. 1991); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985).

In view of the above, an obviousness-type double patenting rejection must satisfy the same requirements established for rejections under 35 U.S.C. §103. Therefore, a conclusory statement that all of Applicant’s claims are unpatentable over “the claims” of U.S. Patent No. 6,132,476 because they “appear to be obvious variants of one another” is clearly improper. Applicant refers above to the discussion of MPEP section 2143 which describes the requirements of a *prima facie* rejection under 35 U.S.C. § 103. At minimum, the Office Action should identify the particular claims of the cited reference that allegedly render Applicant’s claims obvious, and *explain* how those particular claims so render Applicant’s claims obvious. Without such a statement of the rejection, Applicant has no opportunity to respond to the basis for the alleged obviousness.

**B. Rejection Under U.S. Patent No. 6,132,476**

Claims 1-9 and 27-35 have been rejected under the doctrine of obviousness-type double patenting as being unpatentable in view of claims of U.S. Patent No. 6,626,964.

Applicant objects to the rejection for the same reasons described above in relation to the rejection of Applicant's claims under U.S. Patent No. 6,132,476.

**C. Rejection Under U.S. Pub. No. 2004/0045103**

Claims 1-9 and 27-35 have been rejected under the doctrine of obviousness-type double patenting as being unpatentable in view of claims of U.S. Pub. No. 2004/0045103.

Applicant objects to the rejection for the same reasons described above in relation to the rejection of Applicant's claims in view of U.S. Patent No. 6,132,476.

**D. Claims Under U.S. Pub. No. 2003/0167580**

Claims 1-9 and 27-35 have been rejected under the doctrine of obviousness-type double patenting as being unpatentable in view of claims of U.S. Pub. No. 2003/0167580.

Applicant objects to the rejection for the same reasons described above in relation to the rejection of Applicant's claims in view of U.S. Patent No. 6,132,476.

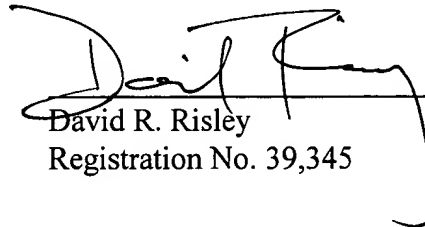
**VII. New Claims**

As identified above, claims 36-45 have been added into the application through this Response. Applicant respectfully submits that these new claims describe an invention novel and unobvious in view of the prior art of record and, therefore, respectfully requests that these claims be held to be allowable.

### CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Alexandria, Virginia 22313-1450, on

Sept. 22, 2004

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